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### COLLAPSIBLE DISPLAY-ARRANGEMENT

#### TECHNICAL FIELD

The present invention relates generally to a collapsible 5 display-arrangement and more particularly to a display arrangement having a base unit that can be placed, attached and/or rest against a support surface, a sheet, banner, panel, screen or the like that can be rolled up or unrolled and on which a picture and/or text appears, and also a support for 10 supporting and retaining the sheet/banner/panel/screen.

In display arrangements of the type to which the present invention relates, it is already known to arrange a rod or the like at the upper edge of the sheet, said rod being designed to be able to firmly, but in easily removable manner, cooperate with an upper end part of said support.

The term "sheet" used hereafter refers primarily to a surface showing a picture and/or text applied on a cloth, a sheet of paper or other equivalent backing, the material of the sheet being so flexible and bendable that it can be rolled on a roller-blind rod or the like (with a diameter of 20 mm or more) and can be unrolled without the rolling having caused troublesome deformation when the sheet is unrolled. In the present patent application, the term "sheet" shall be interpreted as meaning all types of devices of this kind, including devices otherwise termed banners, panels, screens etc.

#### BACKGROUND ART

Display arrangements of the type described above are already known in a number of different embodiments, one example of such a display arrangement being shown in more detail and described with reference to FIGS. **1–4** of the present application.

Such a display arrangement has a base unit within which a sheet showing a picture or text that can be rolled up and unrolled, is rolled up like a roller-blind by means of a reeling device and wherein the sheet can be unrolled from the base unit and wherein a rod being arranged at the upper edge of the sheet and being attachable to the upper part of the support against the force of the reeling device in the base unit, the sheet being kept taut by its own weight and the spring force in the reeling device.

The display arrangement described above is marketed by Expand International AB, Nacka, Sweden, under the trade name "Quick Screen".

Observing now the significant properties of the present invention, it shall also be mentioned that it is already known 50 to apply relatively thick magnetic strips to side-oriented edge parts of one or more sheets so that sheets placed adjacent each other may co-operate edge to edge without, or substantially without, obvious joins between the sheets.

# DESCRIPTION OF THE PRESENT INVENTION

# Technical Problem

Observing the circumstance that the technical deliberations one skilled in the art must perform in order to be able to offer a solution to one or more of the technical problems posed, there is initially an insight into the measures and/or the sequence of measures to be taken, and also a choice of the mean(s) necessary, and consequently the following technical problems are no doubt relevant when developing the present invention.

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Considering the state of the art as described above it is undoubtedly a technical problem in a collapsible display arrangement of the type described in the introduction, to be able to create such conditions that a display arrangement and/or a plurality of adjacently placed display arrangements can be used to easily expose a picture and/or text and easily allow storage of the display arrangement in an assembled state.

A technical problem is also entailed in being able to create such conditions that, using a number of adjacently placed display arrangements, a picture or text extending across several display arrangements can be exposed without visible joins between adjacent display arrangements or, at least to be able to offer only negligibly discernible joins between them.

A technical problem is also entailed in being able to create such conditions that, particularly in display arrangements having a height that exceeds the stretch of a person and preferably considerably (0.2–1.0 m) exceeds the stretch of a person, the orientation of upper surface parts for the sheets, belonging to adjacently placed display arrangements, can be coordinated by means of magnetic attraction between permanent magnets related to surface parts or rods, for instance to upper surface parts.

It is a technical problem to be able to perceive the significance of allowing upper surface parts of a sheet to be provided with a reinforcing rod or the like, the end parts of which shall co-operate with permanent magnets, particular those manufactured with a high magnetic attractive force.

A technical problem is also entailed in being able to perceive the significance of and advantages associated with being able to simultaneously offer not only a horizontally directed magnetic co-operation and retention between the end parts of two upper rods or the like, belonging to one each of adjacently situated display arrangements, but also to create conditions for allowing opposing edge parts in the form of side-related edge parts of the sheet to be provided with individual permanently magnetised magnetic strips or the like in order to offer reinforcement of the co-operation of the sheets and offer a distinct vertical co-operation.

A technical problem is then entailed in being able to perceive the significance of and the advantages associated with allowing at least one end part of an upper rod be in distinct co-operation with an end part of a second rod, and where opposed end parts are adapted for being provided with at least one permanent magnet, and that the magnetisation direction or directions is/are so chosen that an attractive force will operate between said opposing end parts, such as a first permanent magnet pertaining to a first display arrangement and a second permanent magnet or the like pertaining to an adjacent display arrangement.

A technical problem is also entailed in being able to perceive the significance of and the advantages associated with allowing said rod to be assigned a longitudinally oriented cavity or a channel extending between end parts facing away from each other, in which one or more permanent magnets may be firmly related.

A technical problem is also entailed in being able to perceive the significance of being able to select a suitable shape for the purpose, and attractive force for the permanent magnet(s) or the like used, in order to produce one or more magnetic fields that are co-ordinated to attract appropriate rods or the like to each other and retain them in a fixed position in relation to each other, such as a straight extension or line, with a suitably high resistance to bending to permit the rods or the like to be withdrawn from their fixed position in relation to each other.